

## FIGURE LEGENDS

Supplemental Material, Figure 1. Effect of As (0~10  $\mu$ M) on the cell viability in RA-induced differentiating cell. RA-induced differentiating Neuro-2a cells were treated with arsenic (0, 0.625, 1.25, 2.5, 5, and 10  $\mu$ M) for 48 h, and the viability of cells was determined by MTT. Each data point was the mean  $\pm$ S.E. of three independent experiments. \* $p < 0.05$ , statistically significant difference from RA-treated cells.

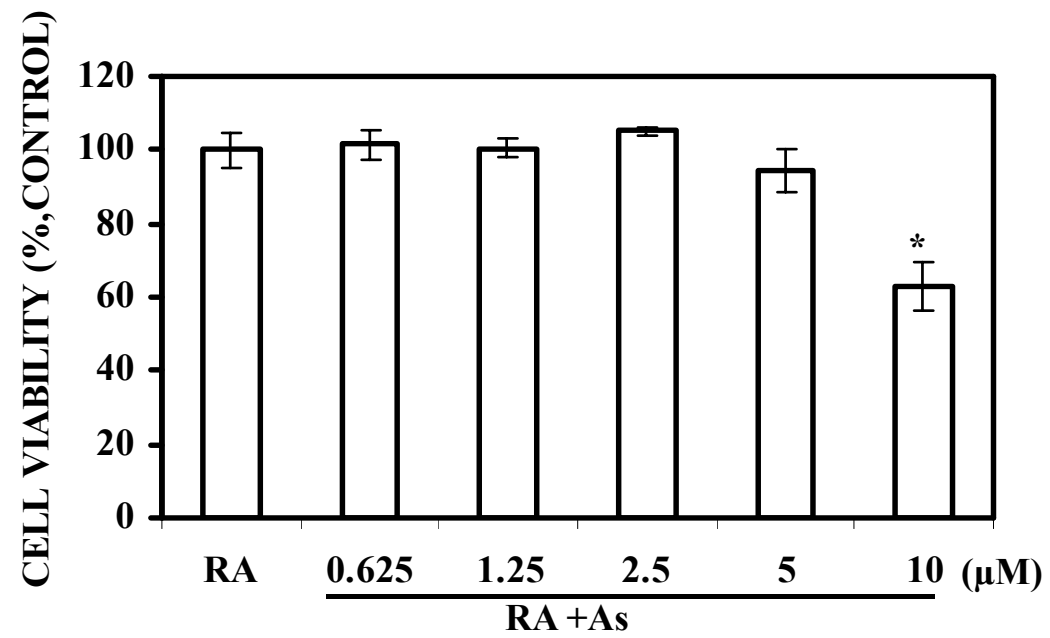
Supplemental Material, Figure 2. (F) The expression of NF and MAP2 were determined by western blot and immunofluorescence staining.

Supplemental Material, Figure 3. Relative amount of expression of p-AMPK $\alpha$  (Thr172), p-AMPK $\beta$ , and p-ACC in RA and combined treatment at each time point (Top panel), and relative fold increase of RA treatment compared with RA/As treatment (Bottom panel). The relative amounts of p-AMPK $\alpha$  (Thr172), p-AMPK $\beta$ , and p-ACC were measured microdensitometrically and normalized to the expression of GAPDH. Each data point was the mean  $\pm$ S.E. of three independent experiments.

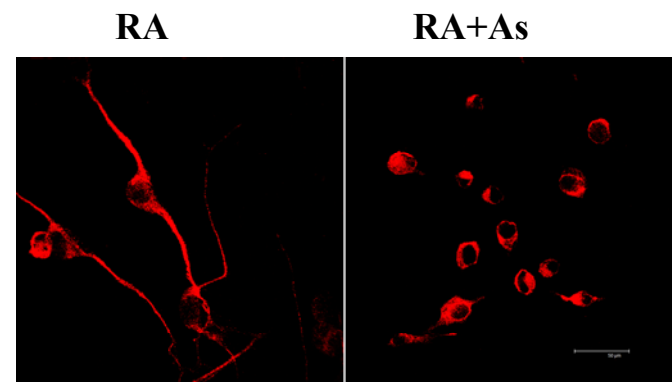
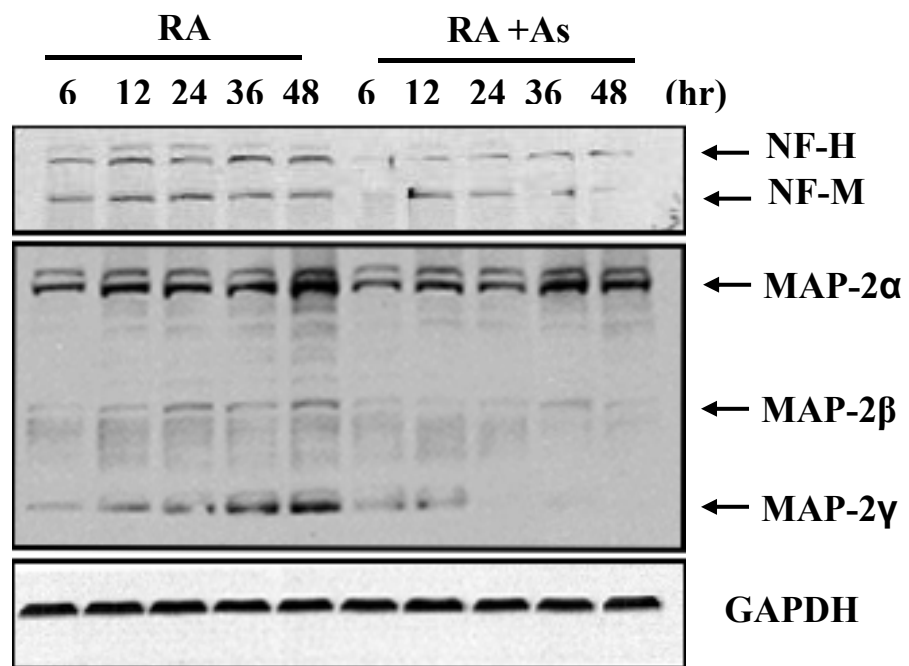
Supplemental Material, Figure 4. Relative amount of expression of p-LKB1 (Ser428) in RA and RA/As treatment at each time point (Top panel), and relative fold increase of RA treatment compared with RA/As treatment (Bottom panel). The relative amounts of p-LKB1 (Ser428) were measured microdensitometrically and normalized to the expression of GAPDH. Each data point was the mean  $\pm$ S.E. of three independent experiments.

Supplemental Material, Figure 5. Relative amount of p-LKB1 and LKB1 in the cytoplasm and nucleus. The relative amounts of p-LKB1 (Ser428) and LKB1 were measured microdensitometrically and normalized to the expression of GAPDH. Each data point was the mean  $\pm$ S.E. of three independent experiments.

Supplemental Material, Figure 6. The expression of CaMKK $\beta$  in RA and RA/As treatment at each time point. The expression of CaMKK $\beta$  was determined with immunoblotting. The expression of GAPDH served as an internal loading control.

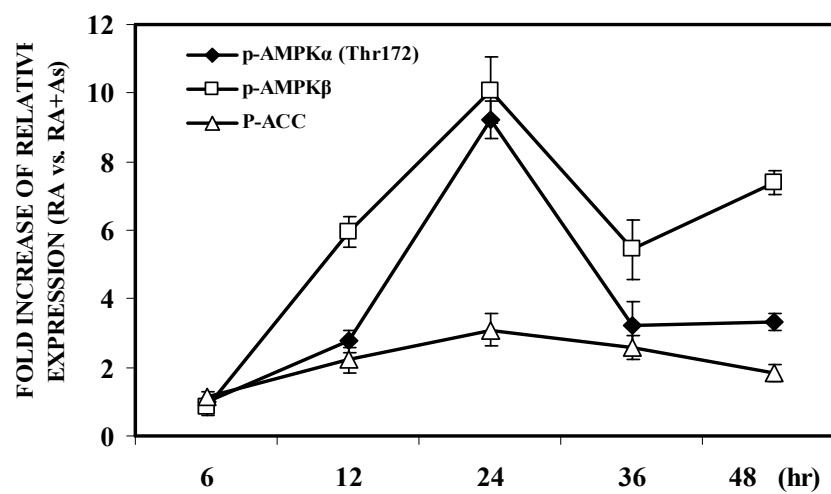
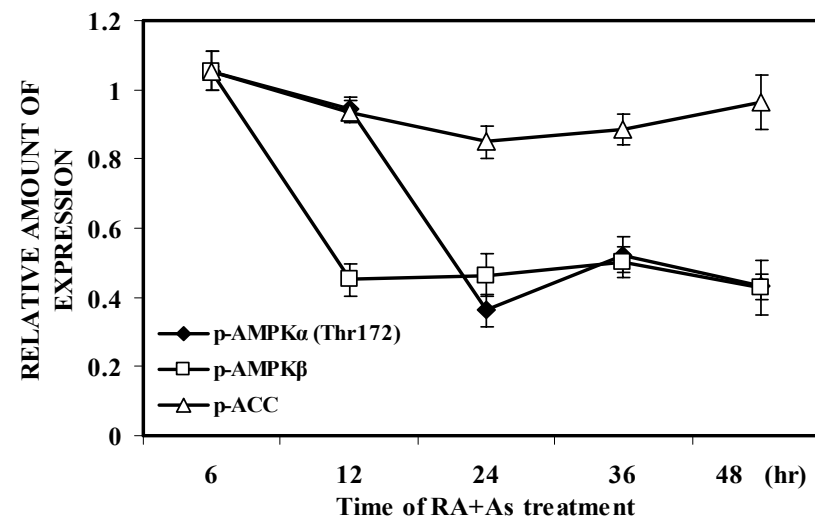
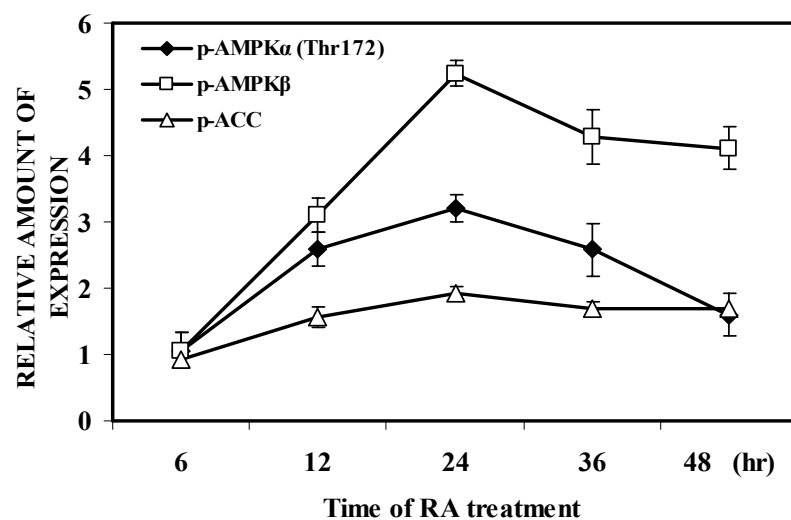


Supplemental Material, Figure1

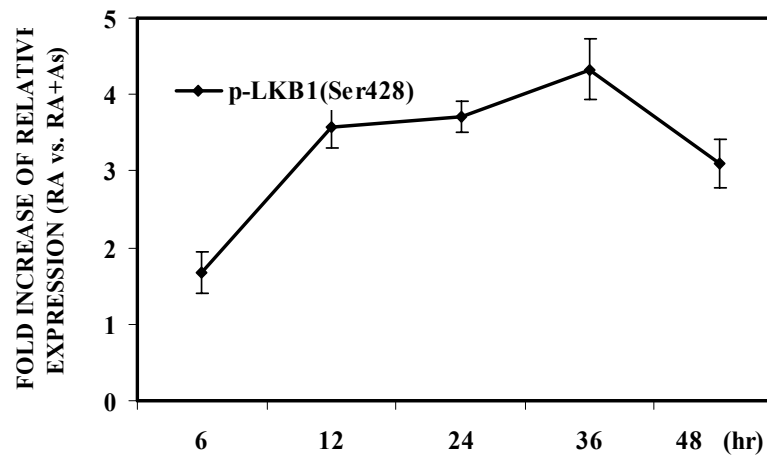
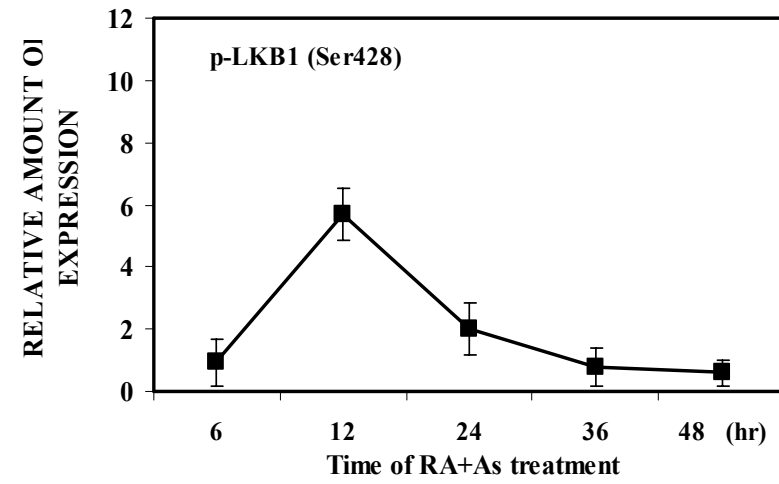
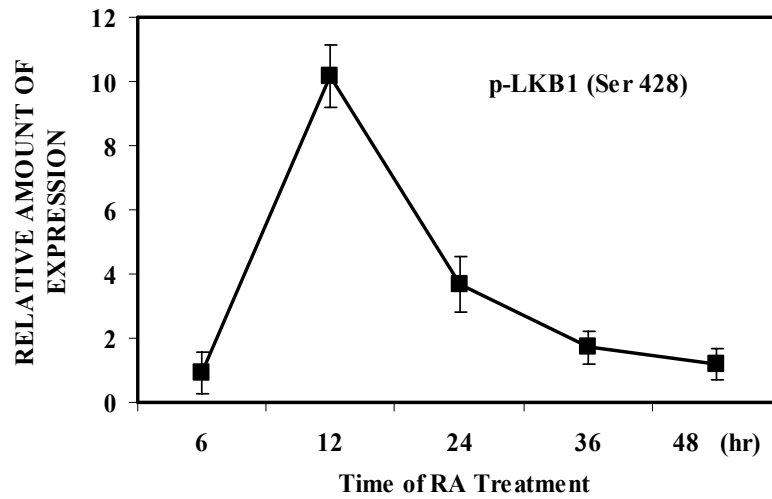


MAP2 staining

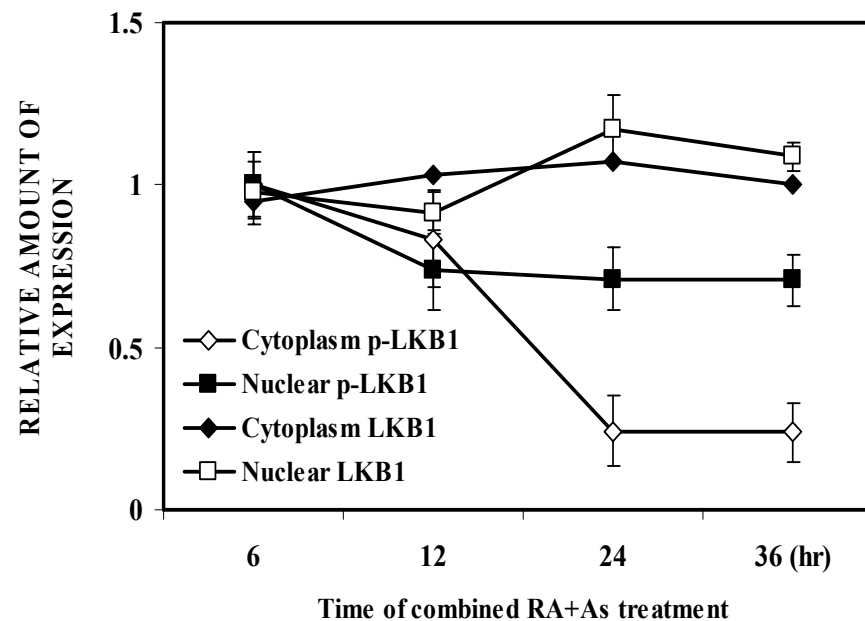
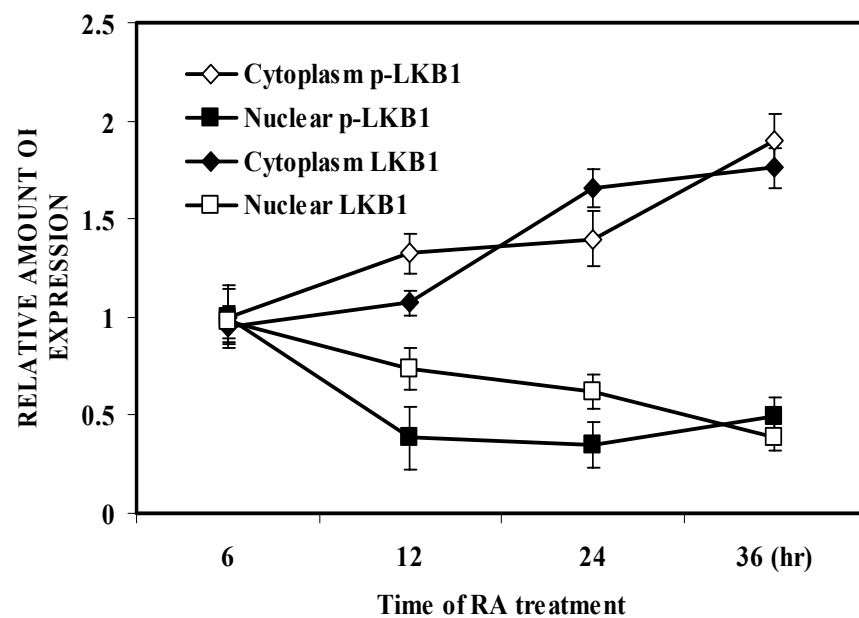
Supplemental Material, Figure 2



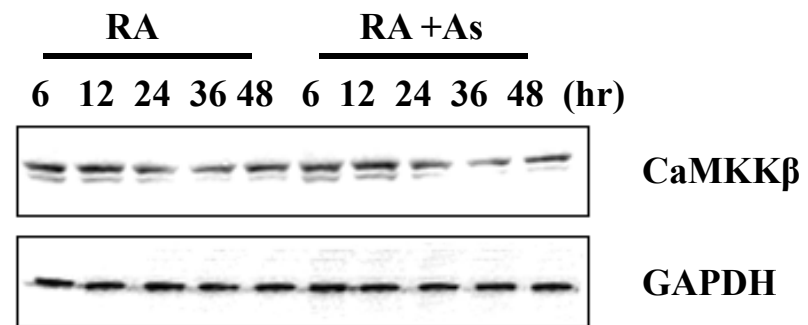
Supplemental Material, Figure 3



Supplemental Material, Figure 4



Supplemental Material, Figure 5



Supplemental Material, Figure 6